News release

Climate Science for the 21st Century

17 January 2005

Launch of Major UK-Japan Initiative at British Embassy, Tokyo

UK and Japanese scientists will today join forces at the British Embassy in Tokyo to formalise a unique and powerful collaboration that will significantly advance the science of predicting climate change for the 21st century. The aim of this five-year partnership is to combine the brainpower of top UK and Japanese climate science experts with cutting-edge supercomputing technology in Japan. The UK is investing £1.4m in this initiative.

The Foreign Secretary, Jack Straw, will open the seminar during his bilateral visit to Japan on 19 January. Mr Straw will outline UK plans and aims for climate change during its G8 presidency, including highlighting the importance Japan plays as a partner both on climate change and science.

Six scientists from the NCAS Centre for Global Atmospheric Modelling (CGAM) and the Met Office's Hadley Centre will be based in Japan where they will be given substantial access to the Japanese Earth Simulator supercomputer, one of the world's most powerful machines. Here, they will run the UK's state-of-the-art climate models with the most complex science incorporated to date and at the highest resolution ever. Not only will the physical effects of the atmosphere, ocean and land on the Earth's climate be considered, but the interactions of plants and marine life with the climate will also be studied.

These advances will allow climate change scenarios to be produced for the coming decades with unprecedented detail and with improved estimates of key societal and economical vulnerabilities. They will enable UK and Japanese scientists to explore the direct impacts of climate change on the environment, such as the production of foodstuff and timber, water and energy resources, and air quality.

CGAM Director, Professor Julia Slingo said: "International collaboration on this scale has never been more timely. Together, we are looking forward to making significant progress in our understanding of how weather and climate systems work right across the globe and how climate change will affect the environment. For example, we hope to be able to assess with more confidence the likely changes in hazardous weather events, enabling governments and policy makers to plan ahead and set in place contingency measures. This should ultimately help to save money and lives."

The impacts of extreme weather have increasingly significant financial and human consequences. 2004 has been the most expensive year ever for the insurance industry in payouts for damage due to hurricanes and typhoons across the globe - the US has estimated $90 billion of damage caused by natural disasters in 2004, and Japan has experienced the highest number of tropical storms on record. The human cost has also been phenomenal - the Caribbean island of Haiti alone, experienced 3,000 deaths caused by Hurricane Jeanne in September 2004.

Notes to editors:

1. The official launch of the UK-Japan Collaboration on Climate Change Science is being held on Wednesday 19 January 2005 at the Ambassador's Residence, British Embassy in Tokyo.

It will begin at 13:00 with an hour-long press conference: Professor Julia Slingo - Director of NCAS Centre for Global Atmospheric Modelling; Dr David Griggs - Director of the Hadley Centre; Dr Nikos Nikiforakis - DAMTP, University of Cambridge, and Professor Sato - Director General of the Earth Simulator Center, Yokohama will give a press briefing and will be available for interview.

The press conference will be followed by an afternoon of talks, see the UK-Japan Climate Collaboration web page.

If you are a member of the press and are interested in attending this event please contact Dr Louisa Watts, NCAS Science Communications Manager, as soon as possible; e-mail: NCAScomms@nerc.ac.uk

2. To arrange interviews with scientists in advance of the launch, please contact:
Dr Louisa Watts, NCAS Science Communications Manager - e-mail NCAScomms@nerc.ac.uk or Wayne Elliott, Met Office Press Officer - telephone 01392 886655, or Dr Kathy Maskell, NCAS Centre for Global Atmospheric Modelling; tel: 0118 378 8315.

Please note: scientists attending the launch left for Japan on 15 January 2005. However, other key scientists involved in the collaboration will remain in the UK and will be available for interview beyond this date.

3. A web page containing a flyer for the event, background information and images for use is available on the UK-Japan Climate Collaboration web page.

4. The NERC Centres for Atmospheric Science - NCAS - carry out the UK's core academic atmospheric research programme, including climate variability and climate change. NCAS is funded by the Natural Environment Research Council. The Centre for Global Atmospheric Modelling - CGAM - is a component of NCAS. Its staff are drawn from many countries and it has strong involvement with European climate research. Both NCAS Head Quarters and CGAM are based at the University of Reading.

5. The Met Office's Hadley Centre is a renowned centre for climate prediction and research and is based in Exeter. The work carried out at the Hadley Centre is primarily funded by Defra and other UK Government departments.

6. The Earth Simulator Center is located in Tokyo, Japan. It houses the Earth Simulator supercomputer, which is the world's biggest and fastest vector supercomputer. Opened in March 2002, the Earth Simulator is dedicated to solving 'Grand Challenge' problems facing the Earth in the coming decades. The Earth Simulator is ten times more powerful than anything currently available to scientists in the UK and is housed in a custom-made building with a floor space equivalent to four tennis courts. The Earth Simulator Center is funded by the Japanese Agency for Marine-Earth Science and Technology - JAMSTEC.

7. The Foreign and Commonwealth Office has provided pump-priming funds through the Global Opportunies Fund (GOF) for the UK-Japan collaboration in Climate Change.

8. The University of Cambridge is a key member of this collaboration through the participation of Dr. Nikos Nikiforakis in the GOF project on new numerical techniques. Dr Nikiforakis will be attending and speaking at the launch.

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